

The opinion in support of the decision being entered
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHONG HIN CHEE

Appeal 2007-1480
Application 10/667,078
Technology Center 2800

Decided: August 14, 2007

Before JOSEPH L. DIXON, ANITA PELLMAN GROSS, and
JEAN R. HOMERE, *Administrative Patent Judges*.
DIXON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the
Examiner's Final Rejection of claims 1-12. We have jurisdiction under
35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

Appellant invented a print mechanism utilizing an optical imaging sensor to sense the print medium. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A print mechanism comprising:

a print head assembly comprising a position detector and a marking device, said position detector comprising an imaging device for forming an image of a portion of an edge of a print medium, said print medium having a top edge, side edges, and a bottom edge;

an actuator for moving said print head assembly relative to said print medium in a predetermined direction; and

a controller for determining a location for at least one of said edges of said print medium from said formed image.

PRIOR ART

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Miyakawa	US 4,617,580	Oct. 14, 1986
Wen	US 6,109,745	Aug. 29, 2000
Endo	US 2004/0246285 A1	Dec. 9, 2004
		(filed Feb. 18, 2003)

REJECTIONS

Claims 1-9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Endo. Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Endo in view of Wen. Claims 11 and 12 stand

rejected under 35 U.S.C. § 103(a) as being unpatentable over Endo in view of Miyakawa.

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the Appellant regarding the above-noted rejection, we refer to the Examiner's Answer (mailed Nov. 22, 2006) for the reasoning in support of the rejections, and to Appellant's Brief (filed Mar. 13, 2006) and Reply Brief (filed Jan. 9, 2007) for the arguments thereagainst.

OPINION

In deciding this appeal, we have given careful consideration to Appellant's Specification and claims, to the applied prior art references, and to the respective positions articulated by Appellant and the Examiner. As a consequence of our review, we affirm the Examiner's rejections for the reasons follow.

ANTICIPATION

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. We determine the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827,

1830 (Fed. Cir. 2004). The properly interpreted claim must then be compared with the prior art.

“It is well settled that a prior art reference may anticipate when the claim limitations not expressly found in that reference are nonetheless inherent in it. Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates.” *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002) (citations and internal quotation marks omitted). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1951 (Fed. Cir. 1999) (citations and internal quotation marks omitted).

“[A] prima facie case of anticipation [may be] based on inherency.” *In re King*, 801 F.2d 1324, 1327, 231 USPQ 136, 138-39 (Fed. Cir. 1986). Once a prima facie case of anticipation has been established, the burden shifts to the Appellant to prove that the prior art product does not necessarily or inherently possess the characteristics of the claimed product. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977) (“Where, as here, the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product.”). *See also In re Spada*, 911 F.2d 705, 708-09, 15 USPQ2d 1655, 1657-58 (Fed. Cir. 1990).

Appellant argues that independent claim 1 recites “an imaging device for forming an image of a portion of an edge of a print medium” and contends that the Examiner is not giving the term “image” its ordinary and customary meaning. (Br. 4-5 and Reply Br. 1-3). The Examiner maintains that the Specification should be the focal point of the interpretation even if there is no express definition therein to interpret the claim language (Answer 7-11). We agree with both the Examiner and Appellant that a combination of both dictionaries and the Specification can serve as a guide for interpreting the meaning of a term in a given claim. We note however, that the best source to put the claimed invention into context is Appellant’s Specification.

Here, we find both sources useful, but neither controlling. Rather, we find the language of independent claim 1 and the use of the phrase “an image of a portion of an edge” to be a controlling in the interpretation. The question is: what is a “portion” of an edge with either asserted definition of an image. We find that a portion of an edge is as little as a single point or two points that determine a line/edge which we find to be taught by the image sensor 29 of Endo. We find that the Specification at page 4, lines 11-13, states that “[t]he image generated by the position detector is preferably a plurality of pixel values organized as a plurality of rows that run in the direction of travel of the print head.” We find this language to clarify that the image of the portion of the edge may be a single pixel value obtained by the image sensor 29 which we find to be taught by Endo.

If Appellant desired to claim an array of photodetectors then the claim should have been amended. Here, we find the broadest reasonable interpretation of independent claim 1 to read on the teachings of Endo.

Therefore, we cannot agree with Appellant that the ordinary meaning in the art controls and that a position detector that includes an imaging array in the Specification would control the interpretation of the claim language (Br. 5.)

We find that accepting Appellant's argument would require us to read limitations as to the structure of the imaging device into the express language of independent claim 1, which we will not do. Therefore, Appellant's argument is not persuasive, and we will sustain the rejection of independent claim 1 and independent claim 5 and dependent claims 3, 4, 6, 7, and 9, which Appellant has elected to group therewith.

With respect to dependent claims 2 and 8, Appellant argues the Examiner has not pointed to any teaching of determining a brightness value for a medium and that Endo merely teaches measuring the output of the photodetector (Br. 5-6). The Examiner maintains that the presence or absence of light relative to a threshold value is determined by Endo at paragraph [0127] (Answer 4 and 15). We find this disclosure to sufficiently teach the claimed invention. Therefore, Appellant's argument is not persuasive. Therefore, we will sustain the rejection of dependent claim 2 and 8.

With respect to dependent claim 10, Appellant argues that the combination of the two teachings would have two moving parts. This argument is not commensurate in scope with dependent claim 10 since such limitation is not recited in dependent claim 10 (Br. 5). Therefore, Appellant's argument is not persuasive. Appellant summarily argues that Endo can already determine the size of the medium, and, therefore, there is no motivation to combine the two teachings (Br. 6). If Appellant admits that Endo can determine the edges from the measured data and argues that

there is no motivation to add the other structure of Wen, we are at a loss as to why it would not have been obvious to one skilled in the art at the time of the invention to have determined the edges using the system of Endo alone as Appellant admits to achieve the recited method. Therefore, Appellant's argument is not persuasive, and we will sustain the rejection of dependent claim 10.

With respect to dependent claims 11 and 12, Appellant argues that Miyakawa does not disclose altering the amount of ink dispensed based on determination of the brightness of the print medium. The Examiner maintains that the determination of the medium type may be based upon light transmissivity or reflectivity as taught by Miyakawa (Answer 16). We agree with the Examiner. Therefore, Appellant's argument is not persuasive, and we will sustain the rejection of dependent claim 11 and dependent claim 12 grouped therewith.

CONCLUSION

To summarize, we have sustained the rejection of claims 1-9 under 35 U.S.C. § 102, and we have sustained the rejection of claims 10-12 under 35 U.S.C. § 103(a).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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